

NETWORK INTERCONNECTION METHODS/INTERCONNECTION TRUNKING

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This Appendix Network sets forth the terms and conditions for (1) Network Interconnection Methods (as set forth in sections 1 – 6) and (2) Interconnection Trunking Requirements (as set forth in sections 7 – 21) between the Parties' networks. For the purposes of this Appendix, "facilities" are the physical paths by which traffic is carried between the Parties' networks. "Trunking" requirements are the capacity needs related to the number of ports in a switch to support the amount of traffic being handed off between the networks.

1. DEFINITIONS

- 1.1 "Access Tandem" is defined as a switching machine within the public switched telecommunications network that is used to connect and switch trunk circuits between and among other central office switches for IXC-carried traffic.
- 1.2 Intentionally Omitted.
- 1.3 "End Office" or "End Office Switch" is as defined in Appendix Definitions.
- 1.4 Intentionally Omitted.
- 1.5 "IntraLATA Toll" traffic describes IntraLATA Traffic between two locations within one LATA where one of the locations lies outside the local calling area defined by the SBC ILLINOIS tariff approved by the Commission.
- 1.6 "ISP-Bound Traffic" is as defined in Appendix Reciprocal Compensation.
- 1.7 "Local Tandem" refers to any Local Only, Local/IntraLATA, or Local/Access Tandem Switch serving a particular LCA (defined below).
- 1.8 "Local/Access Tandem" is defined as a switching machine within the public switched telecommunications network that is used to connect and switch trunk circuits between and among other central office switches for Section 251(b)(5)/IntraLATA Traffic and IXC-carried traffic.
- 1.9 Intentionally Omitted.
- 1.10 "Local Interconnection Trunk Groups" are defined as trunk groups designated to exchange (between SBC and MCIm) Section 251(b)(1) Traffic, (ii) ISP-Bound Traffic, and (iii) IntraLATA toll Traffic (delivered by SBC or MCIm on behalf of their respective end users).
- 1.11 "Local/IntraLATA Tandem" is defined as a switching machine within the public switched telecommunications network that is used to connect and switch trunk circuits between and among other central office switches for Section 251(b)(5)/IntraLATA Traffic.
- 1.12 Intentionally Omitted.
- 1.13 Intentionally Omitted.
- 1.14 A "Point of Interconnection" ("POI") is a physical point on SBC ILLINOIS' network where SBC ILLINOIS' and MCIm's networks meet and where traffic is delivered to each other. Each Party remains responsible for the facilities on its side of the POI.
- 1.15 Intentionally Omitted.

- 1.16 Section 251(b)(5) Traffic is as defined in Appendix Reciprocal Compensation.
- 1.17 "Section 251(b)(5)/IntraLATA Traffic" shall mean for purposes of this Appendix, (i) Section 251(b)(5) Traffic, (ii) ISP-Bound Traffic, (iii) IntraLATA toll Traffic originating from an end user obtaining local dial tone from MCIm where MCIm is both the Section 251(b)(5) Traffic and IntraLATA toll provider, and/or (iv) IntraLATA Toll Traffic originating from an end user obtaining local dialtone from SBC ILLINOIS where SBC-ILLINOIS is both the Section 251(b)(5) Traffic and IntraLATA toll provider.
- 1.18 "Trunk" or "Trunk Group" is as defined in Appendix Definitions.

2. NETWORK INTERCONNECTION METHODS

- 2.1 Upon request by MCIm, SBC ILLINOIS shall provide interconnection for the facilities and equipment of MCIm with SBC ILLINOIS' network for the transmission and routing of Telephone Exchange Service and Exchange Access at any Technically Feasible POI inside the geographical areas in which SBC ILLINOIS is the Incumbent LEC and within SBC ILLINOIS' network. The interconnection must be at least equal in quality to that provided by SBC ILLINOIS to itself or to any subsidiary, Affiliate, or any Third Party to which SBC ILLINOIS provides Interconnection. SBC ILLINOIS shall provide Interconnection on rates, terms and conditions that are just, reasonable and nondiscriminatory in accordance with the terms and conditions of this Agreement and the requirements of the Act.
- 2.2 In accordance with the requirements of this Agreement, the Parties shall establish POI(s) at any Technically Feasible point inside the geographical areas in which SBC ILLINOIS is the Incumbent LEC and within SBC ILLINOIS' network by any Technically Feasible means established herein, including, but not limited to, a Fiber Meet.
- 2.3 If MCIm determines to establish new or change existing Interconnection arrangements with SBC ILLINOIS, it will provide written notice of the need to establish or change such Interconnection to SBC ILLINOIS. Upon receipt of MCIm's notice to interconnect, the Parties shall within thirty (30) days or other mutually agreed to timeframe schedule a meeting to negotiate and mutually agree on the network architecture (including trunking). The Interconnection Activation date will be mutually agreed upon and will begin based on a reasonable schedule established at these meetings.
- 2.4 If either Party deploys additional Tandems and/or End Office switches in a LATA after the Effective Date or otherwise wishes to establish Interconnection with additional switches in such LATA, the Parties will work cooperatively to establish such Interconnection.
- 2.5 MCIm is solely responsible for the facilities that carry OS/DA, 911, and Meet-Point trunk groups.
- 2.6 The physical architecture plan will, at a minimum, include the location of MCIm's switch(es) and SBC ILLINOIS' End Office switch(es) and/or Tandem switch(es) to be interconnected, the facilities that will connect the two networks and which Party will provide (be financially responsible for) the Interconnection facilities.
- 2.7 The Parties will designate Points of Interconnection for demarcation of the Parties' networks for purposes of maintenance and provisioning. SBC ILLINOIS will be responsible for engineering and maintaining its network on its side of the Points of Interconnection. MCIm will be responsible for engineering and maintaining its network on its side of the Points of Interconnection.

3. NETWORK ARCHITECTURE AND POINTS OF INTERCONNECTION

- 3.1 Each Party is responsible, including financially, for the facilities and engineering on its side of the POI(s). Each Party is responsible for the appropriate sizing, operation and maintenance of the transport facility to the POI(s). The Parties agree to provide sufficient facilities for the Interconnection trunk groups required for the exchange of traffic between MCIm and SBC ILLINOIS.
- 3.2 Neither Party shall dismantle any established POI unless it either reaches an agreement with the other Party or receives Commission approval.

4. METHODS OF INTERCONNECTION

4.1 Physical Collocation

- 4.1.1 When MCIm provides its own facilities or uses the facilities of a 3rd Party to an SBC ILLINOIS Tandem or End Office and wishes to place its own transport terminating equipment at that location, MCIm may interconnect using the provisions of Physical Collocation as set forth in Appendix Collocation.

4.2 Virtual Collocation

- 4.2.1 When MCIm provides its own facilities or uses the facilities of a 3rd Party to an SBC ILLINOIS Tandem or End Office and wishes for SBC ILLINOIS to place transport terminating equipment at that location on MCIm's behalf, they may interconnect using the provisions of Virtual Collocation as set forth in Appendix Collocation.

4.3 Methods of Interconnection Without Collocation

- 4.3.1 When MCIm does not wish to collocate transport terminating equipment at an SBC ILLINOIS Tandem or End Office, MCIm may:
 - (i) self provision, or
 - (ii) deploy third party interconnection facilities.

4.4 Fiber Meet Interconnection

- 4.4.1 Fiber Meet Interconnection between SBC ILLINOIS and MCIm can occur at any mutually agreeable and technically feasible point between MCIm's premises and an SBC ILLINOIS Tandem or End Office within each local exchange area. The Parties may mutually agree to other design options.
- 4.4.2 Where the Parties interconnect their networks pursuant to a Fiber Meet, the Parties shall jointly engineer and operate the Interconnection as described herein. Only Local Interconnection Trunk Groups shall be provisioned over this facility. Additional arrangements may be mutually developed and agreed to by the Parties pursuant to the requirements of this section.
- 4.4.3 Neither Party will be allowed to access the Data Communications Channel ("DCC") of the other Party's Fiber Optic Terminal (FOT). The Fiber Meet will be designed so that each Party may, as far as is technically feasible, independently select the transmission, multiplexing, and fiber terminating equipment to be used on its side of the POI(s). The Parties will work cooperatively to achieve

equipment and vendor compatibility of the FOT equipment. Requirements for such Interconnection specifications will be defined in joint engineering planning sessions between the Parties. The Parties will use good faith efforts to develop and agree on these facility arrangements within ninety (90) days of the determination by the Parties that such specifications shall be implemented, and in any case, prior to the establishment of any Fiber Meet arrangements between them.

4.4.4 The Parties will mutually agree on the minimum data rate hand off of the SONET transmission system and it will be determined during implementation meetings. The Parties may agree to an initial minimum deployment of facilities at the OC48 level.

4.4.4.1 SBC ILLINOIS shall, wholly at its own expense, procure, install, and maintain the specified Fiber Optic Terminal ("FOT") equipment in each SBC ILLINOIS Wire Center where the Parties establish a Fiber Meet. The FOT must have capacity sufficient to provision and maintain all Local Interconnection Trunk Groups in accordance with the requirements of this Appendix.

4.4.4.2 MCIm shall, wholly at its own expense, procure, install and maintain the specified FOT equipment in each MCIm Wire Center where the Parties establish a Fiber Meet. The FOT must have capacity sufficient to provision and maintain all Local Interconnection Trunk Groups in accordance with the requirements of this Appendix.

4.4.4.3 There are two basic Fiber Meet design options available as described below. The option selected must be mutually agreeable to both Parties. Additional arrangements may be mutually developed and agreed to by the Parties pursuant to the requirements of this section.

4.4.4.3.1 Design One: MCIm and SBC ILLINOIS shall provide two fibers between their locations. This design may only be considered where existing fibers are available and there is a mutual benefit to both Parties. SBC ILLINOIS will provide the fibers associated with the "working" side of the system. MCIm will provide the fibers associated with the "protection" side of the system. The Parties will work cooperatively to terminate each other's fiber in order to provision this joint point-to-point linear chain SONET system. Both Parties will work cooperatively to determine the appropriate technical handoff for purposes of demarcation and fault isolation. The POI will be defined as being at the SBC ILLINOIS location.

4.4.4.3.2 Design Two: MCIm will provide fiber cable to the last entrance (or SBC-ILLINOIS designated) manhole at the SBC-ILLINOIS Tandem or End Office switch. SBC-ILLINOIS shall make all necessary preparations to receive and to allow and enable MCIm to deliver fiber optic facilities into that manhole. MCIm will provide a sufficient length of Fiber cable for SBC-ILLINOIS to pull through the SBC-ILLINOIS cable vault. MCIm shall deliver and maintain such strands wholly at its own expense up to the POI. SBC-ILLINOIS shall take the fiber from the manhole

and terminate it inside SBC-ILLINOIS' office at the cable vault at SBC-ILLINOIS' expense. In this case the POI shall be at the SBC-ILLINOIS designated manhole location.

- 4.4.5 Each Party shall provide its own, unique source for the synchronized timing of its FOT equipment. Both Parties agree to establish separate and distinct timing sources, which are not derived from the other, and meet the criteria identified above.

4.5 Other Interconnection Methods

- 4.5.1 SBC ILLINOIS shall provide any other technically feasible Interconnection method mutually agreed to by the Parties.

5. INTENTIONALLY OMITTED

6. SIZING AND STRUCTURE OF INTERCONNECTION FACILITIES

- 6.1 The Parties shall work cooperatively to install and maintain efficient and reliable Interconnection arrangements.
- 6.2 The capacity of Interconnection facilities provided by each Party will be based on mutual forecasts and sound engineering practice, as agreed by the Parties during planning and forecasting meetings. The Parties will mutually agree to determine the appropriate sizing for facilities based on these standards.
- 6.3 The Parties shall work cooperatively to ensure the adequacy of Interconnection facilities. The Parties shall begin discussion to plan facility relief when the overall system facility is at fifty percent (50%) of capacity, or as otherwise agreed. Facilities will be augmented to ensure adequate facility capacity for at least two years of forecasted traffic. Both Parties will negotiate a project service date and corresponding work schedule to construct relief facilities prior to facilities exhaust.

7. INTERCONNECTION TRUNKING ARRANGEMENTS

7.1 General

- 7.1.1 The Parties will establish Local Interconnection Trunk Groups.
 - 7.1.1.1 Intentionally Omitted.
- 7.1.2 The Parties will establish other Interconnection trunk groups as may be required for the exchange of other traffic, including but not limited to Meet Point, Mass Calling, 911, and Operator Services and Directory Assistance.
- 7.1.3 MCIm shall have administrative control over the ASR in the establishment of Interconnection trunk groups in addition to the initial combinations described above.
- 7.1.4 Unless otherwise agreed to, each Party shall deliver all traffic destined to terminate at either party's Switch in accordance with the serving arrangements defined in this Agreement and the LERG.
- 7.1.5 Where the Parties deliver miscellaneous calls (i.e., time, weather, etc.) destined for each other over the Local Interconnection Trunk Groups, the Parties shall

deliver the traffic in accordance with the serving arrangements defined in the LERG.

7.2 Technical Interfaces

7.2.1 When interconnecting at SBC ILLINOIS' switches, the Parties have a preference for use of B8ZS ESF trunks for all traffic between their networks. Where available, each Party shall cooperate to ensure that its trunk groups are configured utilizing the B8ZS ESF protocol. Where AMI trunks are used, either Party may request upgrade to B8ZS ESF when such equipment is available and deployed.

7.2.2 The Parties agree to provide facility electrical handoffs of DS1 or DS3 and at optical handoffs of OCn levels where available and mutually agreed between the Parties. When a DS3 handoff is agreed to by the Parties, SBC ILLINOIS will provide any multiplexing required for DS1 facilities or trunking at their end and MCIm will provide any DS1 multiplexing required for facilities or trunking at their end.

8. TRUNKING

8.1 SBC ILLINOIS deploys in its network Tandems that switch Section 251 (b)(5) and ISP-Bound only traffic, Tandems that switch IntraLATA and InterLATA traffic (Access Tandem), Tandems that switch Section 251(b)(5)/IntraLATA Traffic only, and Tandems that switch both Section 251 (b)(5) and ISP-Bound Traffic and IntraLATA/InterLATA traffic (local/Access Tandem). In addition SBC ILLINOIS deploys Tandems that switch ancillary traffic such as 911 (911 Tandem), Operator Services/ Directory Assistance (OPS/DA Tandem), and mass calling (choke Tandem). Traffic on Tandem trunks does not terminate at the Tandem but is switched to other trunks that terminate the traffic in End Offices and ultimately to end user customers.

8.2 For interconnection trunks established after the Effective Date of this Agreement, two-way trunking shall be established for all Local Interconnection Trunk Groups. The Parties agree to exchange traffic data on two-way trunks and to implement such an exchange within three (3) months of the date that two-way trunking is established and the trunk groups begin passing live traffic, or another date as agreed to by the Parties. Exchange of traffic data will permit each company to have knowledge of the offered and overflow load at each end of the two-way trunk group, and thereby enable accurate and independent determination of performance levels and trunk requirements. The Parties agree to the electronic exchange of data as described in the Trunk Data Exchange section below.

8.3 End Office Trunk Groups

8.3.1 Direct End Office trunks terminate traffic from a MCIm switch to an SBC ILLINOIS End Office and are not switched at a Tandem location. MCIm shall establish a two-way direct End Office trunk group when End Office traffic requires twenty-four (24) or more trunks. Overflow from either end of the Direct End Office trunk group will be alternate routed to the appropriate Local Tandem unless the End Office does not subtend any local tandem. All traffic received by SBC ILLINOIS on the Direct End Office trunk group from MCIm must terminate in the End Office, i.e. no Tandem switching will be performed in the End Office.

8.4 In addition to the Interconnection trunking arrangements described above, either party may establish End Office-to-End Office or End Office-to-Tandem or Tandem-to-Tandem

trunk groups. In the case of host-remote End Offices, trunking arrangements may be established at the location of the host.

- 8.5 The Parties recognize that embedded one-way trunks exist for Section 251 (b)(5)/IntraLATA Traffic via end point meet facilities. The Parties agree the existing one-way trunking architecture may remain in place and be augmented for growth as needed. The Parties may subsequently agree to negotiate a transition plan to migrate the embedded one-way trunks to two-way trunks via a Fiber Meet architecture. The Parties will coordinate any such migration, trunk group prioritization, and implementation schedule. The Parties agree to develop a cutover plan and project manage the cutovers.

8.6 Traffic Direction

- 8.6.1 The Parties shall not apportion the cost for two-way trunks based upon each Party's relative use (i.e. traffic direction) of such trunks.

8.7 Tandem Trunk Groups – Single Tandem LATAs

- 8.7.1 MCIm shall establish direct trunking to an SBC ILLINOIS tandem if busy hour traffic reaches the DS-1 level for three consecutive months.

8.8 Tandem Trunk Groups – Multiple Tandem LATAs

- 8.8.1 MCIm shall establish direct trunking to an SBC ILLINOIS tandem if busy hour traffic reaches the DS-1 level for three consecutive months.

9. MEET POINT TRUNKING ARRANGEMENTS

- 9.1 IXC-carried intraLATA and interLATA toll traffic shall be transported between MCIm's Central Office and SBC ILLINOIS' Access Tandem over a "Meet Point" Trunk Group separate from Section 251 (b)(5)/IntraLATA Traffic Except for any embedded based of one-way trunks existing as of the Effective Date, InterLATA trunk groups will be set up as two-way and will utilize SS7 signaling, except Multi-Frequency ("MF") signaling will be used on a separate "Meet Point" trunk group to complete originating calls to switched access customers that use MF FGD signaling protocol.
- 9.2 Meet Point Interconnection Trunk Groups will be established between MCIm's Switch and SBC ILLINOIS Access or combined Local Access Tandem to transport InterLATA traffic separate from Section 251 (b)(5)/IntraLATA Traffic. The Parties will establish separate trunk groups to each SBC ILLINOIS Access Tandem under which MCIm's NXXs home.
- 9.3 Intentionally Omitted.
- 9.4 Intentionally Omitted.
- 9.5 Intentionally Omitted.
- 9.6 Intentionally Omitted.
- 9.7 SBC ILLINOIS will not block switched access customer traffic delivered to the SBC ILLINOIS Tandem for completion on MCIm's network. In no event will SBC ILLINOIS be required to route such traffic through more than one Tandem for connection to/from switched access customers. SBC ILLINOIS shall have no responsibility to ensure that any switched access customer will accept traffic that MCIm directs to the switched access customer.

9.8 Toll Free Trunking Arrangements

- 9.8.1 If MCIm chooses SBC ILLINOIS to handle 800/(8YY) database queries from its switches, all MCIm originating 800/(8YY) traffic will be routed over the InterLATA Meet Point Trunk Group. This traffic will include a combination of both Interexchange Carrier (IXC), 800/(8YY) service and MCIm 800/(8YY) service that will be identified and segregated by carrier through the database query handled through SBC ILLINOIS Tandem switch.
- 9.8.2 MCIm may handle its own 800/8YY database queries from its switch. If so, MCIm will determine the nature (local/IntraLATA/InterLATA) of the 800/8YY call based on the response from the database. If the query determines that the call is a local or IntraLATA 800/8YY number, MCIm will route the post-query local or IntraLATA converted ten-digit local number to SBC ILLINOIS over the Local Interconnection Trunk Groups. In such case, MCIm is to provide an 800/8YY billing record when appropriate. If the query reveals the call is an InterLATA 800/8YY number, MCIm will route the post-query InterLATA call (800/8YY number) directly from its switch for carriers interconnected with its network or over the meet point group to carriers not directly connected to its network but are connected to SBC ILLINOIS' Access Tandem. Calls will be routed to SBC ILLINOIS over the Local Interconnection Trunk Groups and InterLATA trunk groups within the LATA in which the calls originate.
- 9.8.3 Intentionally Omitted
- 9.8.4 All originating Toll Free Service (800/8YY) calls for which MCIm requests that SBC-ILLINOIS perform the Service Switching Point ("SSP") function (e.g., perform the database query) shall be delivered using GR-394 format over the Meet Point Trunk Group. Carrier Code "0110" and Circuit Code (to be determined for each LATA) shall be used for all such calls.
- 9.8.5 All post-query Toll Free Service (800/8YY) calls for which MCIm performs the SSP function, if delivered to SBC-13STATE, shall be delivered using GR-394 format over the Meet Point Trunk Group for calls destined to IXCs, or shall be delivered by MCIm using GR-317 format over the Local Interconnection Trunk Group for calls destined to End Offices that directly subtend the Tandem.

10. 911 TRUNKING ARRANGEMENTS

- 10.1 Upon request, SBC ILLINOIS will provide nondiscriminatory access to its 911/E911 facilities and databases, equal in quality to that provided to itself, facilitating the provision of service to MCIm. The Parties agree to provide access to 911/E911 in a manner that is transparent to the Customer. The Parties will work together to facilitate the prompt, reliable, and efficient Interconnection of MCIm's systems to SBC ILLINOIS' 911/E911 platforms, with a level of performance that will provide at least the same grade of service as that which SBC ILLINOIS provides to itself, its Customers, subsidiaries, Affiliates or any third-party.
- 10.2 Subject to section 10.2.1 below (Trunking Exception), MCIm, with SBC ILLINOIS' cooperation shall establish dedicated trunks from MCIm's Central Office to each SBC ILLINOIS 911/E911 Selective Router (i.e., 911 Tandem Office) for the provision of 911/E911 services and for access to all subtending PSAPs ("911 Interconnection Trunk Groups"). MCIm may establish such Interconnection by providing its own facilities/trunks, or by leasing such facilities/trunks from a third party.

- 10.2.1 **TRUNKING EXCEPTION** The Parties agree that MCIm shall not be required to establish 911 trunking or interconnection to SBC ILLINOIS's 911 Selective Routers in rate centers where MCIm does not originate local (dial tone) traffic for its end user customers ("Non-Dial Tone Rate Centers"). MCIm shall identify such Non-Dial Tone Rate Centers when completing the "MCIm to SBC Network Information Sheet" ("NIS") and SBC ILLINOIS specifically agrees that no other notification shall be required of MCIm. SBC ILLINOIS shall not be required to provide 911 services for those Non-Dial Tone Rate Centers designated by MCIm on a NIS. MCIm agrees that it will not originate dial tone service for its customers in such Non-Dial Tone Rate Centers until 911 connectivity has been established pursuant to the requirements of this Agreement and Applicable Law. MCIm acknowledges that, if MCIm wishes to begin offering originating dial tone service in a Non-Dial Tone Rate Center, the establishment of 911 connectivity for these existing rate centers shall be subject to the same intervals for establishing 911 connectivity that are applicable to new rate centers. When MCIm designates a rate center as a Non-Dial Tone Rate Center, MCIm agrees to indemnify SBC ILLINOIS, in accordance with the requirements of the General terms, for any 911 claims made by MCIm's customers in that Non-Dial Tone Rate Center arising from MCIm's decision not to interconnect with SBC ILLINOIS's 911 Selective Routers in that Non-Dial Tone Rate Center.
- 10.3 SBC ILLINOIS shall assure sufficient capacity at the 911 selective router to meet MCIm's requests for Interconnection within twenty (20) business days after receipt of the request. When SBC ILLINOIS network force and load conditions require a longer implementation timeframe, SBC ILLINOIS will notify MCIm within five (5) business days after receipt of the request and the timeframe will be agreed upon. SBC ILLINOIS is not responsible to provide diversity for MCIm to the 911 selective router.
- 10.4 SBC ILLINOIS shall provide the following information to MCIm, and shall promptly notify MCIm of any changes:
- 10.4.1 SBC ILLINOIS processes and requirements for ordering trunks for 911 service and Interconnection to the 911 selective router.
- 10.4.2 Trunk group specifications.
- 10.4.3 E911 tandem CLLI codes, circuit IDs, point codes, LEC order number, and TS (Two Six) code and address.
- 10.4.4 Intentionally Omitted.
- 10.4.5 Maintenance procedures for 911 trunk groups, including, but not limited to, contact names and numbers, escalation lists, and the hours that maintenance is available.
- 10.4.6 Intentionally Omitted.
- 10.5 Intentionally Omitted.
- 10.6 Incoming trunks for 911 shall be engineered to assure minimum P.01 grade of service as measured using the "busy day/busy hour" criteria.
- 10.7 Interconnection for Primary and Diverse Routes. MCIm's Point of Interconnection (POI) for E911/911 Service shall be at the SBC ILLINOIS 911 Selective Router. These facilities

are the financial responsibility of MCIm. MCIm shall pay tariff charges for diverse routes. MCIm will be responsible for determining and ordering the proper quantity of E911/911 trunks. These trunks shall be delivered by SBC ILLINOIS within twenty (20) business days after receipt of the order. If SBC ILLINOIS requires additional information, MCIm agrees to cooperate to provide such information in order to complete the order. When SBC ILLINOIS network force and load conditions require a longer implementation timeframe, SBC ILLINOIS will notify MCIm within five (5) business days after receipt of the request and the timeframe will be agreed upon. Following delivery, MCIm and SBC ILLINOIS will cooperate to promptly test all E911/911 trunks and transport facilities between MCIm's network and the SBC ILLINOIS Selective Router to assure proper functioning of the 911 service. MCIm will not turn-up live 911 traffic until successful call through testing is completed by both Parties.

- 10.8 Except as set forth in Section 10.2 of this Appendix Network, MCIm will be responsible for providing a separate 911 trunk group for each rate center, county or geographic area that MCIm serves, if such rate center, county or geographic area has a separate default routing condition. In addition, in the case of CAMA MF trunks, only one (1) NPA of traffic may be transmitted over a single 911 trunk group. When a unique default routing condition is present, MCIm shall provide sufficient trunking and facilities to accommodate those default PSAP requirements. MCIm is responsible for requesting and payment of facilities routed diversely for 911 interconnection.
- 10.9 MCIm will be responsible for determining the proper quantity of trunks and facilities from its switch(es) to the SBC ILLINOIS 911 selective router Office(s).
- 10.10 MCIm shall provide sufficient facilities/trunks to route MCIm originating 911 calls to the 911 selective router. MCIm is responsible to request and pay for facilities routed diversely for 911 interconnection.
- 10.11 Intentionally Omitted.
- 10.12 MCIm shall monitor the 911 trunks for the purpose of determining originating network traffic volumes. MCIm will notify SBC ILLINOIS if the traffic study information indicates that additional circuits are required to meet the current level of 911 call volumes. If the traffic study indicates that additional trunks are needed to meet the current level of 911 call volumes, MCIm shall request and pay for facilities carrying additional trunks from SBC ILLINOIS at the applicable access tariff rates.
- 10.13 Where 911 interconnection is established, MCIm acknowledges that its End Users in a single local calling scope may be served by different selective routers and MCIm shall be responsible for providing facilities to route calls from its End Users to the proper 911 selective router.

11. HIGH VOLUME CALLING TRUNK GROUPS

- 11.1 The Parties will cooperate to establish separate trunk groups for the completion of calls to high volume customers, such as radio contest lines.
- 11.2 A dedicated trunk group shall be required to the designated Public Response HVCI/Mass Calling Network Access Tandem in each serving area. This trunk group shall be one-way outgoing only and shall utilize MF signaling. As the HVCI/Mass Calling trunk group is designed to block all excessive attempts toward HVCI/Mass Calling NXXs, it is necessarily exempt from the one percent blocking standard described elsewhere for other final local Interconnection trunk groups. MCIm will have administrative control for the purpose of issuing ASRs on this one-way trunk group.

- 11.3 It is recommended that this group shall be sized as follows:

Number of Access Lines Served	Number of Mass Calling Trunks
0 – 10,000	2
10,001 – 20,000	3
20,001 – 30,000	4
30,001 – 40,000	5
40,001 – 50,000	6
50,001 – 60,000	7
60,001 – 75,000	8
75,000 +	9 maximum

- 11.4 If MCIm should acquire a HVCI/Mass Calling customer, i.e. a radio station, MCIm shall notify SBC ILLINOIS of the need to establish a one-way outgoing SS7 or MF trunk group from the SBC ILLINOIS HVCI/Mass Calling Serving Office to the MCIm customer's serving office and SBC ILLINOIS shall establish this trunk group.
- 11.5 If MCIm finds it necessary to issue a new choke telephone number to a new or existing HVCI/Mass Calling customer, MCIm may request a meeting to coordinate with SBC ILLINOIS the assignment of HVCI/Mass Calling telephone number from the existing choke NXX. In the event that MCIm establishes a new choke NXX, MCIm must notify SBC ILLINOIS a minimum of ninety (90) days prior to deployment of the new HVCI/Mass Calling NXX. SBC ILLINOIS will perform the necessary translations in its End Offices and Tandem(s) and issue ASR's to establish a one-way outgoing SS7 or MF trunk group from the SBC ILLINOIS Public Response HVCI/Mass Calling Network Access Tandem to MCIm's choke serving office.
- 11.6 Intentionally Omitted

12. OPERATOR SERVICES TRUNKING ARRANGEMENTS

- 12.1 If SBC ILLINOIS agrees through a separate appendix or contract to provide Operator Services for MCIm the following trunk groups are required:
- 12.1.1 Where MCIm purchases Operator Services from SBC ILLINOIS, the Parties will establish separate trunk groups from MCIm's Switch to SBC ILLINOIS operator switch ("Operator Services Trunk Groups").
- 12.1.2 When SBC ILLINOIS' operator is under contract to provide Busy Line Verification/Emergency Interrupt service to MCIm's end user customer, SBC ILLINOIS will utilize a separate one-way trunk group using MF signaling, from SBC ILLINOIS' Operator Services Tandem to MCIm's Switch.
- 12.2 If MCIm does not purchase unbundled Operator Services from SBC-ILLINOIS, the Parties may interconnect their respective OS platforms for the purposes of inward operator assistance, (see Appendix Inward), as follows:
- 12.2.1 The parties shall mutually agree on the physical interconnection necessary to route these call, subject to the Dispute Resolution section of the General Terms and Conditions of the Agreement.
- 12.2.2 Intentionally Omitted.

13. DIRECTORY ASSISTANCE TRUNKING ARRANGEMENTS

- 13.1 MCIm may contract for DA services only. A segregated trunk group for these services will be required to the appropriate SBC ILLINOIS Operator Services Tandem in the LATA for the NPA MCIm wishes to serve. This trunk group is setup as one way outgoing only and utilizes Modified Operator's Services Signaling (2 Digit Automatic Number Identification (ANI)). MCIm will have administrative control for the purpose of issuing ASR's on this one-way trunk group.

14. SIGNALING

- 14.1 Where Signaling System 7 (SS7) is deployed, the Parties will use SS7 signaling as defined in GR-317 and GR-394, including ISDN User Part ("ISUP") for trunk signaling and Transaction Capabilities Application Part ("TCAP") for SS7 based features.. The Parties may interface with one another on an SS7 basis either directly or through a Third Party. The Parties will cooperate in the exchange of TCAP messages to facilitate full interoperability of SS7 based features between their respective networks, including CLASS features and functions, to the extent each carrier offers these features and functions to its own end user customers. The Parties shall exchange unaltered SS7 signaling parameters, including, but not limited to, Automatic Number Identification (ANI), Calling Party Number (CPN), Calling Party Category, Charge Number, Originating Line Information (OLI), etc. Privacy indicators will be honored by the parties.
- 14.2 Where available, the Parties will provide network signaling information such as Transit Network Selection ("TNS") parameter, Carrier Identification Codes ("CIC"), Common Channel Signaling (CCS) Platform and CIC/OZZ information (non-CCS environment) at no charge wherever this information is needed for call routing or billing. The Parties will follow all industry standards pertaining to TNS and CIC/OZZ codes.

15. INTENTIONALLY OMITTED**16. FORECASTING**

- 16.1 MCIm agrees to provide an initial non-binding trunk forecast for establishing the initial Interconnection trunks. SBC ILLINOIS shall review this forecast and if it has any additional information that will change the forecast shall provide this information to MCIm. Subsequent forecasts shall be provided on a semi-annual basis, not later than January 1 and July 1 in order to be considered in the semi-annual publication of the SBC ILLINOIS General Trunk Forecast. These forecasts should include yearly forecasted trunk quantities for all appropriate trunk groups described in this Appendix for a minimum of three (3) years. Parties agree to the use of Common Language Location Identification (CLLI) coding.
- 16.2 SBC ILLINOIS shall accommodate all orders for trunks within forecast. Orders for trunks that exceed forecasted quantities for forecasted locations by more than 48 additional DS-0 trunks for each Local Interconnection Trunk Group will be accommodated as facilities or equipment becomes available. Parties shall make all reasonable efforts and cooperate in good faith to develop alternative solutions to accommodate orders when facilities are not available.
- 16.3 If forecast quantities are in dispute by more than 48 additional DS-0 trunks for each Local Interconnection Trunk Group, the Parties shall meet to reconcile the forecast to within 48 DS-0 trunks.
- 16.4 The semi-annual forecasts shall include:

- 16.4.1 Yearly forecasted trunk quantities (which include measurements that reflect actual Tandem local Interconnection and InterLATA trunks, End Office Local Interconnection trunks, and Tandem subtending Local Interconnection End Office equivalent trunk requirements) for a minimum of three (current and plus 1 and plus 2) years; and
- 16.4.2 A description of major network projects anticipated for the following six months. Major network projects include trunking or network rearrangements, shifts in anticipated traffic patterns, orders greater than four (4) DS1's, or other activities that are reflected by a significant increase or decrease in trunking demand for the following forecasting period.
- 16.5 Each Party shall provide a specified point of contact for planning, forecasting, and trunk servicing purposes.
- 16.6 MCIm and SBC ILLINOIS will review engineering requirements on a semi-annual basis and establish forecasts for facilities utilization provided under this Appendix.

17. TRUNK DESIGN BLOCKING CRITERIA

- 17.1 Trunk requirements for forecasting and servicing shall be based on the blocking objectives shown in Table 1. Trunk requirements shall be based upon time consistent average busy season busy hour twenty (20) day averaged loads applied to industry standard Neal-Wilkinson Trunk Group Capacity algorithms (use Medium day-to-day Variation and 1.0 Peakedness factor until actual traffic data is available).

TABLE 1

Trunk Group Type	Design Blocking Objective
Local Tandem	1%
Local Direct End Office (Primary High)	ECCS ¹
Local Direct End Office (Final)	1 %
IntraLATA	1%
Local/IntraLATA	1%
InterLATA (Meet Point) Tandem	0.5%
911	1%
Operator Services (DA/DACC)	1%
Operator Services (0+, 0-)	1%
Busy Line Verification-Inward Only	1%

18. TRUNK SERVICING

- 18.1 Trunk sizing responsibilities for Operator Services trunks used for stand-alone Operator Service are the sole responsibility of MCIm.
- 18.2 Utilization shall be defined as Trunks required as a percentage of Trunks In Service. Trunks required shall be determined using methods described in this Appendix using Design Blocking Objectives stated above.

¹ During implementation the Parties will mutually agree on an ECCS or some other means for the sizing of this trunk group.

- 18.3 Each Party agrees to service trunk groups to the foregoing blocking criteria in a timely manner when trunk groups exceed measured blocking thresholds.
- 18.4 Orders between the Parties to establish, add, change or disconnect trunks shall be processed by using an Access Service Request (ASR). MCIm will have administrative control for the purpose of issuing ASR's on one-way or two-way trunk groups. The Parties agree that neither party shall alter trunk sizing without first conferring with the other Party.
- 18.5 Both Parties may send an ASR or a Trunk Group Service Request (TGSR) to the other party to trigger changes to the Local Interconnection Trunk Groups based on capacity assessment. The TGSR is a standard industry support interface. MCIm's preference is to use the ASR process to trigger changes to Local Interconnection Trunk Groups. Upon receipt of a TGSR, the receiving Party will issue an ASR to the other Party within ten (10) business days. The intervals used for the provisioning process will be the same as those used for SBC ILLINOIS Switched Access service.
- 18.6 BLOCKING - In a blocking final situation, a TGSR will be issued by SBC ILLINOIS when additional capacity is required to reduce measured blocking to objective design blocking levels based upon analysis of trunk group data. MCIm upon receipt of a TGSR, in a blocking situation, will issue an ASR to SBC ILLINOIS within three (3) business days after receipt of the TGSR or sooner as agreed to by the Parties, and upon review and in response to the TGSR received. MCIm will note "Service Affecting" on the ASR.
- 18.7 UNDER UTILIZATION - In an under utilization situation (where more capacity exists than actual usage requires) the Parties agree that if a trunk group is under 75 percent (75%) of CCS capacity on a monthly average basis, for each month of any three (3) consecutive months period, either Party may request the issuance an order to resize the trunk group, which must be left with not less than twenty-five percent (25%) excess capacity. In all cases grade of service objectives shall be maintained. SBC ILLINOIS may send a TGSR to MCIm to trigger changes to the Local Interconnection Trunk Groups based on capacity assessment. Upon receipt of a TGSR, MCIm will, within the ten (10) business days of such receipt, either (i) issue an ASR to SBC ILLINOIS or (ii) request that the Parties schedule a joint planning discussion for the TGSR.
- 18.8 If MCIm does not respond to the TGSR within the ten (10) business day period described above, SBC ILLINOIS will contact MCIm to schedule a joint planning discussion. If MCIm will not agree to meet within an additional ten (10) business days and present adequate reason for keeping trunks operational, SBC-ILLINOIS reserves the right to issue an ASR to resize the Local Interconnection Trunk Groups and facilities.

19. PROVISIONING

- 19.1 SBC ILLINOIS shall provide a Firm Order Confirmation (FOC) within five business days for trunk augments, and within seven business days for new trunk groups, after receipt of a complete and accurate order.
- 19.1.1 In cases where SBC ILLINOIS has issued a FOC and, facilities are found not to be available, MCIm shall utilize SBC ILLINOIS' escalation process. For facility/switching equipment shortages, SBC ILLINOIS shall include relief date status and explanation for the shortage under the "REMARKS" field. If no relief date is available, "further status due date" shall be provided. On the date that status is due, SBC ILLINOIS shall re-FOC with updated status by close of business.

- 19.2 Orders that comprise a major project may be submitted over a period of several days, and their implementation will be jointly planned and coordinated. Major projects are unusual or extraordinary projects that require the coordination and execution of multiple orders, greater than 4 DS1s or related activities between and among SBC ILLINOIS and MCIm work groups, including, but not limited to, the initial establishment of Local Interconnection Trunk Groups or Meet Point Trunk Groups and service in an area, NXX code moves, re-homes, facility grooming, or network rearrangements.
- 19.3 The Parties shall cooperate with each other to test all trunks prior to turn up.
- 19.4 Due dates and intervals used for the provisioning process are provided in the CLEC Online handbook. The Parties shall notify each other if there is any change affecting the service requested, including, but not limited to, the due date. If either Party is unable to or not ready to perform Acceptance Tests, or is unable to accept the Local Interconnection Trunk Groups by the due date, the other Party will provide with a requested revised service due date that is no more than thirty (30) calendar days beyond the original service due date. If either Party requests a service due date change which exceeds the allowable service due date change period, the ASR must be canceled by the issuing Party. Should the issuing Party fail to cancel such ASR, the other Party shall treat that ASR as though it had been canceled.
- 19.5 The Parties shall share responsibility for their respective Control Office functions for Local Interconnection Trunk Groups and both Parties shall share the overall coordination, installation, testing, and maintenance responsibilities for such trunks and trunk groups.
- 19.6 Intentionally Omitted
- 19.7 MCIm and SBC ILLINOIS shall:
- 19.7.1 Provide trained personnel with adequate and compatible test equipment to work with each other's technicians.
- 19.7.2 Notify each other when there is any change affecting the service requested, including the due date.

20. TRUNK DATA EXCHANGE

- 20.1 MCIm has requested and SBC ILLINOIS shall provide Data Interexchange Carrier (DIXC) traffic data for all trunk groups terminating in MCIm's network. A trunk group utilization report (TIKI) is also available, upon request. The TIKI report is provided in a MS-Excel format.
- 20.2 The Parties agree to exchange traffic data on trunks and to implement such an exchange within three (3) months of the date that trunking is established and the trunk groups begin passing live traffic, or another date as agreed to by the Parties. Exchange of traffic data will permit each company to have knowledge of the offered and overflow load at each end of the two-way trunk group, and thereby enable accurate and independent determination of performance levels and trunk requirements. The Parties agree to the electronic exchange of data. Parties agree to establish a timeline for implementing an exchange of traffic data utilizing the DIXC process via network data mover (NDM)/FTP computer to computer File Transfer Process (FTP).
- 20.3 DIXC traffic data will include, but not be limited to, the following:
- 20.3.1 Usage (total usage measured in centum call seconds)
- 20.3.2 Peg Count (Peg count of originating call attempts including overflow)

- 20.3.3 Overflow (Peg count of originating call attempts failing to find an idle trunk)
- 20.3.4 Maintenance Usage (total maintenance usage measured in centum call seconds)
- 20.3.5 Maintenance Busy Counts (total count of trunks made maintenance busy)

- 20.4 DIXC traffic data shall be collected as follows:
 - 20.4.1 Hourly on the clock hour
 - 20.4.2 Twenty-four (24) hours per day (0000-2400)
 - 20.4.3 Seven (7) days per week (including holidays)
 - 20.4.4 Fifty-two (52) weeks per year

21. MAINTENANCE TESTING AND REPAIR

- 21.1 MCIm and SBC ILLINOIS shall work cooperatively to install and maintain a reliable network. MCIm and SBC ILLINOIS shall exchange appropriate information (e.g., maintenance contact numbers, network information, information required to comply with law enforcement and other security agencies of the Government and such other information as the Parties shall mutually agree) to achieve this desired reliability. In addition, the Parties agree to:
 - 21.1.1 Coordinate and schedule testing activities of their own personnel, and others as applicable, to ensure its Interconnection trunks/trunk groups are installed per the Interconnection order, meet industry standard acceptance test requirements, and are placed in service by the due date. Either Party may initiate the joint activities.
 - 21.1.2 Perform trouble sectionalization to determine if a trouble is located in its facility or its portion of the Interconnection trunks prior to referring the trouble to each other.
 - 21.1.3 Advise each other's Control Office if there is an equipment failure that will affect the Interconnection trunks.
 - 21.1.4 Provide each other with a trouble reporting number that is readily accessible and available twenty-four (24) hours per day / seven (7) days a week.
 - 21.1.5 Provide to each other test line numbers and access to test lines, including a test line number that returns answer supervision in each NPA-NXX opened by a Party.

22. INTENTIONALLY OMITTED

23. NETWORK MANAGEMENT

- 23.1 Protective Controls. Either Party may use protective network traffic management controls such as 7 and 10 digit code gaps set at appropriate levels on traffic toward each other's network, when required to protect the public switched network from congestion due to facility failures, switch congestion or failure or focused overload. MCIm and SBC ILLINOIS shall immediately notify each other of any protective control action planned or executed.
- 23.2 Expansive Controls. Where the capability exists, originating or terminating traffic re-routes may be implemented by either Party to temporarily relieve network congestion due to facility failures or abnormal calling patterns. Reroutes will not be used to circumvent normal trunk servicing. Expansive controls will only be used when mutually agreed to by the Parties.

- 23.3 Mass Calling. MCI and SBC ILLINOIS shall cooperate and share pre-planning information regarding cross-network call-ins expected to generate large or focused temporary increases in call volumes, to prevent or mitigate the impact of these events on the public switched network.